INCOME DISTRIBUTION DATA REVIEW – KOREA

1. Available data sources used for reporting on income inequality and poverty

1.1. OECD reporting:

OECD income distribution and poverty indicators for Korea are computed by Statistics Korea from the *Household Income & Expenditure* survey combined with *Farm household economy* survey. Data are available annually from 2006 to 2011.

1.2. National reporting and reporting in other international agencies:

1.2.1 National reporting:

Income distribution and poverty indicators for Korea are also available from:

- The same combination of Household Income & Expenditure survey combined with Farm household economy survey from previous years, using different coverage of population
 - Since 2006: all households (same series as OECD reference series)
 - Since 2003: only for 2 and more non-farm household
 - Since 1990: only for urban salary and wage worker, 2 and more household
- KIHASA's series from KOWEPS(Korea Welfare Panel Study), every year from 2005 to 2009
- Two series based from the Korea Labor Institute 's KLIPS (Korean Labor & Income Panel Study) published in (1) Jang & Lee (2010) and (2) Kim (2011), every year from 1997 to 2006/7.

1.2.2 International reporting:

OECD earnings indicators for Korea are from Entreprise Survey (Wage Structure Survey) from the Korean Ministry of Labour (Yearbook of Labour Statistics). (see Part II).

Table 1 presents the main characteristics of the different sources:

	National survey (Income)								
Name	Combination of Household Income & Expenditure survey combined with Farm household economy survey	KOWEPS (Korea Welfare Panel Study)	KLIPS (Korean Labor & Income Panel Study)						
Name of the responsible agency	Statistics Korea, Welfare Statistics division	Korea Institute for Health and Social Affairs(KIHASA)	Korean Labor Institute(Now changed into Korean Employment Information Service)						
Year (survey and income/wage)	HIES (2011:Q2) and FHES (2011:Q4) representing 2010 income	2005 to 2009 income, every year	1997 to 2006/7, every year						
Period over which income is assessed	Annual income for the all year N-1	Annual income for the all year N-2	Annual income for the all year N-3						
Covered population	from 2006 onwards: all population/households; from 2003 onwards: only for 2 and more nonfarm households; from 1990 onwards: only for urban salary and wage worker, 2 and more households	All households including urban and suburb area	All households living in urban areas across the country						
Sample size	999 entity districts per month representing 8800 households	6034 households(5th wave)	5379 households						
Sample procedure	mple procedure Cross-sectional survey. Rolling system(1/3 of sample households are changed every year); once a household is selected in a sample, Income and expenditure data are collected for about 3 years.		two-stage stratified clustering sampling.						
Response rate	81%	N/A	N/A						
Imputation of missing values	Yes	yes	Yes						
Unit for data collection	Household and individual	households and individuals living in both urban and suburb areas.	households and individuals living in urban areas.						
Break in series	-	-	-						
Mish some									
Web source:	http://www.moe.go.kr/engilsn/stat istics/MOL_Survey_Data.jsp	ILL http://koweps.re.kr/0903bbs/bbsd own.asp?type2=3#=145_ (2)http://eng.keis.or.kr/eng/board/ NR boardView.do?bbsCd=1023& seq=20120704161021764¤t Page=&ctgCd=&sortName=&sort Order=&startDt=&endDt=&pageTy pe=®Pwd=N&showSummaryY n=&startDtVal=&endDtVal=&sear chKey=TITLE 1002&searchVal	 (1): Jang & Lee(2010). An Analysis on the Korean Household Income Inequality by Using the Gini Decomposition. APEA2010. Sixth Annual Conference. (2): Kim(2011). The Dynamics of Income Inequality in Korea, The center of regional and global economic studies at Bryant University working paper series. 						

Table 1. Characteristics of datasets used for income reporting, Korea

2. Comparison of main results derived from sources used for OECD indicators with alternative sources

2.1 Income

2.1.1 Time series of Gini coefficients and other inequality indicators

According to both the OECD income distribution database and the Korean source from 2006, income inequality among total population was rather stable between 2006 and 2011 at around 0.31, which is also the level of the OECD average in 2008. Using the same survey and the same methodology, it is not possible to observe long-term trends of income inequality. Data are however available from 2003 for 2 and more non-farm households and from 1990 for households of two persons or more for urban salary and wage workers. The Gini coefficient is 0.02 points lower in these longer series, representing slightly lower inequality within a more restricted sample of the population. Inequality would have gradually increased from 0.25 in 1990 to to 0.29 in 2011.

KIHASA's series from the Korean Welfare Panel Study (KOWEPS) shows a declining trend from 0.335 in 2005 to 0.31 in 2009.

KLIPS series from (1) Jang & Lee (2010) and (2) Kim (2011) show a similar gradual increase in inequality from 1997 to 2006/7, but a higher level of inequality of 0.40.



Figure 1.1 Trends in Gini coefficient (disposable income)

The inter-decile ratio (P90/P10) from the OECD reference survey is slightly higher than the one from the Poverty Statistics Yearbook from Kihasa (<u>http://www.kihasa.re.kr/html/jsp/publication/research/view.jsp?bid=12&ano=1194</u>). Both series show a gradual increase in inequality from 2006 to 2009, then the ratio is stable in 2010 and 2011.



Figure 1.2 Trends in P90/P10

2.1.2 Time series of poverty rates

According to both the OECD income distribution database and the Korean source from 2006, the share of the Korean population living with less than 50% of the median equivalised income (9 994 000 Won per year in 2011) has increased slightly from 14.3% in 2006 to 15.3% in 2009, then it slightly declined to 14.9% in 2010 and back to 15.2% in 2011.

The OECD reference series is 2-3 % point higher than longer series from the combined HIES & FHES with a more restricted sample of the population, showing a gradual increase in relative poverty rates from 7% in 1990 to around 12% in the late 2000s. We can also see a relatively strong increase in poverty in 1998 and 1999 during the Asian crisis. The level went back to 9% in 2000.

KIHASA's series from the Korean Welfare Panel Study (KOWEPS) shows higher levels of poverty and a strong declining trend from 16.4% in 2005 to 13.5% in 2009.



Figure 2.1 Trends in poverty rates

OECD (2012)

As for child poverty, the OECD reference series shows a continuous downward trend from 10.9% in 2007 to 9.4% in 2010, then up to 9.7% in 2011. The Korean source from 2006 shows slightly lower rates but a similar trend.



Figure 2.2 Trends in Child poverty rates

2.2 Wages

See Part II of the present Quality Review.

3. Consistency of income components shares with alternative data sources

3.1. Comparison of main aggregates: earnings, self-employment income, capital income, transfers and direct taxes

Table 2 shows shares of income components for 2011 (the latest available year), according to the OECD benchmark series. Unfortunately, such information could not easily be found for the other data sources described in table 1.

Table 2. Shares of	income com	ponents in total	disposable income,	OECD reference series
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		Survey	Year	Unit	Wages	Capital	Self Employment	Transfers	Taxes	Disposable income
										(HDI)
OECD reference	e suvery	OECD reference suvery	2008	natcur	15 779 796	1 547 730	5 465 000	1 101 725	-2 005 112	21 893 449
				% av HDI	72%	7%	25%	5%	-9%	

Figure 3 compares the trend in shares of public cash transfers in equivalised disposable income from the OECD reference series with the share of total cash social spending in net national income, reported from the OECD Social Expenditure database (OECD SOCX). OECD SOCX series include pensions, incapacity, family, unemployment, social assistance. Both series show upward trends throughout the period, except for the latest year where SOCX data suggest a slight decline.



Figure 3 Trends in shares of public social transfers

4. Metadata of data sources which could explain differences and inconsistencies

Definitions, methodology, data treatment

The OECD reference series fully matches the Korean series from the same data source from 2006. There are no differences. The main difference with series from the same survey but from a different starting year come from the population covered in the survey. The OECD reference series covers the total population, whereas the series from 2003 only covers only for 2 and more nonfarm households, and the series from 1990 only covers urban salary and wage worker, 2 and more households. This would explain the lower inequality and lower poverty rates in the two alternative series.

KIHASA's series from KOWEPS and KLI's series from KLIPS show different trends which are still to be explained.

5. Summary evaluation

The OECD reference series fully matches the series published by Statistics Korea on the basis of the same data source (combined HIES & FHES from 2006). There are no differences The OECD reference series shows (still unexplained) lower levels of inequality than the KLIPS series but it shows similar gradual increase trends in inequality. On the other hand, KIHASA's series from the Korean Welfare Panel Study (KOWEPS) shows more different trends, sometimes in the opposite direction than those suggested by the former series.

As there are data for 2006 in both series from 2006 and from 1990, the 2006 series could be trended backward to compute estimates for longer-term trends for Korea from 1990.